



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/528,966	03/18/2005	Bruce Guy Irvine Dance	GJE-7522	9054	
58899 MARTIN NOV	7590 01/02/2008	EXAMINER			
16355 VINTAGE OAKS LANE			HEINRICH, SAMUEL M		
DELRAY BEA	ACH, FL 33484		ART UNIT	PAPER NUMBER	
		•	1793		
			·		
			MAIL DATE	DELIVERY MODE	
			01/02/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application	No.	Applicant(s)					
Office Action Summary		10/528,966		DANCE ET AL.					
		Examiner		Art Unit					
		Samuel M.	<u> </u>	1725					
The MAILING D	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
WHICHEVER IS LONG - Extensions of time may be avafter SIX (6) MONTHS from the If NO period for reply is specitive. - Failure to reply within the set	CUTORY PERIOD FOR REP GER, FROM THE MAILING vailable under the provisions of 37 CFR of the mailing date of this communication. field above, the maximum statutory period or extended period for reply will, by stati- tice later than three months after the maint. See 37 CFR 1.704(b).	DATE OF THIS 1.136(a). In no even od will apply and will oute, cause the applic	S COMMUNICATION I, however, may a reply be time expire SIX (6) MONTHS from ation to become ABANDONE	N. nely filed the mailing date of this of D (35 U.S.C. § 133).					
Status	•								
1) Responsive to c	ommunication(s) filed on								
2a) ☐ This action is FII	_ 								
•	· · · · · · · · · · · · · · · · · · ·								
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
<u> </u>									
	I)⊠ Claim(s) <u>1-33</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.								
•	5) Claim(s) is/are allowed.								
· · · · · · · · · · · · · · · · · · ·	Claim(s) is/are anowed. Claim(s) 1-33 is/are rejected.								
7) Claim(s)i	- ·			,					
	B) Claim(s) are subject to restriction and/or election requirement.								
Application Papers									
_	is objected to by the Exami	ner							
9) The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 18 March 2005 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority under 35 U.S.C.	§ 119								
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:									
1. ☐ Certified o	1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No									
•	3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.									
" See the attached	detailed Office action for a li	ist of the certific	ed copies not receive	eu.					
Attachment(s)	H (DTO 802)		4) 🔲 Intensious Summani	(PTO 413)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date									
3) M Information Disclosure Sta	atement(s) (PTO/SB/08)		5)	Patent Application					
Paper No(s)/Mail Date <u>18 mar 05</u> . 6)									

10/528,966 Art Unit: 1725

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,861,407 to Volkmann et al. Volkmann et al use an energy beam to form projections on a surface and subsequently adhesively bond the workpiece to another workpiece. The projections improve the joint strength. Volkmann et al do not describe timing steps in order to allow the melted material to at least partially solidify between formation of subsequent projections. The particular timing would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on the translation capability of the laser apparatus and depending on

Application/Control Number:

10/528,966 Art Unit: 1725

properties of the workpiece such as heat transfer. Joining two or more bodies would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending the number of layers desired, for example joining to both sides of a metal workpiece.

Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,176,959 to Clarke. Clarke uses an energy beam to form projections on a surface and subsequently adhesively bond the workpiece to another workpiece. The projections improve the joint strength. Clarke does not describe timing steps in order to allow the melted material to at least partially solidify between formation of subsequent projections. The particular timing would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on the translation capability of the laser apparatus and depending on properties of the workpiece such as heat transfer. Joining two or more bodies would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending the number of layers desired, for example joining to both sides of a metal workpiece.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Volkmann et al, 4,931,125, and Nussbaumer et al, 4,768,897 describe use of projections for improving bonding.

10/528,966

Art Unit: 1725

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Johnson can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

> Samuel M Heinrich **Primary Examiner**

Samuel M. Henrich

Art Unit 1725